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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,524	11/07/2005	Richard James Axe	063030-00079	3578

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ECKERT SEAMANS CHERIN & MELLOTT

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PITTSBURGH, PA 15219

EXAMINER

HOPKINS, ROBERT A

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

07/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,524

Applicant(s)

AXE ET AL.

Examiner

Robert A. Hopkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5-22-06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11, 13, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 3-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date 6-3-05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 18 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites "the system gas". There is a lack of antecedent basis for "the system gas" in previous claim limitations. Correction is requested. Claim 19 depends on claim 18 and hence is also rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2, and 11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Veltman et al(4793832).

Veltman teaches a method of providing gas to a system which separates from a pressurized supply gas(bleed air in figure 2), product gas, the method including conditioning the supply gas by both cooling(second heat exchanger 46) and drying(bulk liquid separator 50) the gas. Veltman further teaches wherein the supply gas is cooled sufficiently to remove from the supply gas by condensation. Veltman further teaches wherein the method includes utilizing ambient air as a coolant in a pre cooler heat exchanger(40), to cool the gas supply prior to conditioning the supply gas.

Claim 13 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Veltman et al(4793832).

Veltman et al teaches in combination a system which separates from supply gas product gas, and a conditioning apparatus to cool the supply gas for use in the separating system, the conditioning system including a condenser in which the supply gas is cooled and dried.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Jones(7048231).

Jones teaches a method of providing gas to a system which separates from a pressurized supply gas(bleed gas 12 in figure 2), product gas, the method including conditioning the supply gas by both cooling(heat exchanger 14) and drying(coalescing filter 26) the gas. Jones further teaches wherein the supply gas is cooled sufficiently to remove from the supply gas by condensation.

Allowable Subject Matter

Claims 3-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 recites "wherein a gas supply is separated into system gas, and supply gas, and the supply gas is fed to a condenser where the supply gas is cooled by a

coolant and moisture is removed from the supply gas to dry the supply gas, and the system gas is passed to a cooling device where the system gas is cooled , and then the cooled system gas is used as the coolant in the condenser". Both Veltman et al and Jones teach a condenser for a gas supply, however neither reference teaches wherein a gas supply is separated into system gas and supply gas. It would not have been obvious to someone of ordinary skill in the art at the time of the invention to provide a step wherein a gas supply is separated into system gas, and supply gas, and the supply gas is fed to a condenser where the supply gas is cooled by a coolant and moisture is removed from the supply gas to dry the supply gas, and the system gas is passed to a cooling device where the system gas is cooled , and then the cooled system gas is used as the coolant in the condenser because neither Veltman et al nor Jones suggest such a modification. Claims 4,5, and 10 depend on claim 3 and hence would also be allowable upon incorporation of claims 2 and 3 into claim 1.

Claim 6 recites "wherein the supply gas, after drying, is further conditioned in a heat exchanger to bring the temperature of the supply gas to within an optimal operating range for the downstream separating system". Neither Veltman et al nor Jones teaches wherein the supply gas, after drying, is further conditioned in a heat exchanger to bring the temperature of the supply gas to within an optimal operating range for the downstream separating system. It would not have been obvious to someone of ordinary skill in the art at the time of the invention to provide a step wherein the supply gas, after drying, is further conditioned in a heat exchanger to bring the temperature of the supply gas to within an optimal operating range for the downstream separating system

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because neither Veltman et al nor Jones suggest such a modification. Claims 7-9 depend on claim 6 and hence would also be allowable upon incorporation of claim 6 into claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Hopkins whose telephone number is 571-272-1159. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm, every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rah
July 17, 2008

/Robert A Hopkins/
Primary Examiner, Art Unit 1797